

WHAT IS CLAIMED IS:

1. An ejector comprising an ejector body having therein integrally formed a nozzle having inlet and outlet ends, a diffuser having inlet and outlet ends and a suction passage defining a suction port between the outlet end of said nozzle and the inlet end of said diffuser, said nozzle and diffuser defining fluid passages of a rectangular cross section having a constant height in which the narrowest portion of the fluid passage of the nozzle defines a throat,

wherein, opposing side walls of said fluid passage of the diffuser have diverging portions each of which resides in a zone of angle of 2.5-5 degrees with respect to a line drawn in parallel with the centerline of the diffuser from the point of the associated one of opposing side walls of said fluid passage of the nozzle at said throat.

2. An ejector according to claim 1, wherein said diverging portions are symmetrically arranged with respect to the centerline of the diffuser so that they define therebetween an angle in a range of 5-10 degrees.

3. An ejector according to claim 2, wherein said diverging portions define 7.5 degrees therebetween.

4. An ejector according to claim 1, wherein said throat defines an elongated rectangular cross section having a major axis in its height direction and a minor axis in its widthwise direction.

5. An ejector according to claim 4, wherein the ratio between the dimensions of said major and minor axes is within a range of 2-4.

6. An ejector according to claim 1, wherein the cross sectional area of said throat is within a range of 1.5-4.0 mm².

7. An ejector according to claim 6, wherein said nozzle is extended from said throat so that said outlet end has a distance from the throat less than 1.0 mm.

8. An ejector according to claim 1, wherein said fluid passage of the diffuser is enlarged in an end portion adjacent to said inlet end to have a constant cross sectional area.

9. An ejector according to claim 8, wherein the ratio of the width of said enlarged end portion of the diffuser to the width of said throat is within a range of 1.4-1.8.

10. An ejector comprising an ejector body having therein integrally formed a nozzle having inlet and outlet ends, a diffuser having inlet and outlet ends and a suction passage defining a suction port between the outlet end of said nozzle and the inlet end of said diffuser, said nozzle and diffuser defining fluid passages of a circular cross section in which the narrowest portion of the fluid passage of the nozzle defines a throat,

wherein, the wall of said fluid passage of the diffuser has diverging portion which diverges in such a way that a generator resides in a zone of angle of 1.75-3.25 degrees with respect to a line drawn in parallel with the centerline of the diffuser from the point on the wall of said fluid passage of the nozzle at the throat.

11. An ejector according to claim 10, wherein said

diverging portion is symmetrical with respect to the centerline of the diffuser so that it defines an angle in a range of 3.5-6.5 degrees.

12. An ejector according to claim 11, wherein said diverging portion defines 5.0 degrees.

13. An ejector according to claim 10, wherein the cross sectional area of said throat is within a range of 1.5-4.0 mm².

14. An ejector according to claim 13, wherein said nozzle is extended from said throat so that said outlet end has a distance from the throat less than 1.0 mm.

15. An ejector according to claim 10, wherein said fluid passage of the diffuser is enlarged in an end portion adjacent to said inlet end to have a constant cross sectional area.